

NEW CIVIC LANDSCAPES:
Manifesting Cultural Sustainability and Civic
Myth in Urban Public Spaces

by

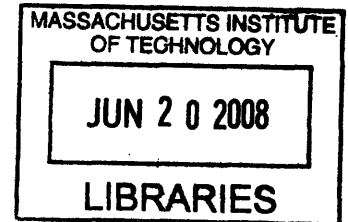
William H. Abrahamson

Submitted to the Department of Architect-
ture in Partial Fulfillment of the Requirements for
the
Degree of Master of Architecture

at the

Massachusetts Institute of Technology

June 2008



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ABSTRACT

Civic spaces represent, constitute, and enhance the daily lives of citizens. As such, they hold an important role in constructing a community's social values regarding sustainable use of shared resources. This project investigates the thesis that constructive evolution and entropy of public space may be realized through architectures of landscape and gathering.

The design project proposes a new city hall for New Orleans, LA, by exploiting latent connections between the city hall-as-site and larger city programs of development, recreation and street spectacle. The existing structure was retained and intersected by a immense sloped and vegetated ground plane. This primary element organized cross-axis circulation, created dynamic vistas across the downtown area, and increased transactional efficacy by organizing existing city services in closer relation to public access. Integrated strategies for daylighting and natural ventilation were maximized throughout.

Thesis Supervisor: Andrew Scott
Title: Associate Professor of Architecture

This is dedicated to my parents for raising an
eternally curious child.

And to my loving wife, for her constant suport
and without whom I wouldn't be half the person I
might someday be.

NEW CIVIC LANDSCAPES: Manifesting Cultural Sustainability and Civic Myth in Urban Public Places

William H. Abrahamson 2008



CIVIC ~ ('si-vik)

[a. L. *civic-us* **belonging to citizens**, f. *civis* - citizen; cf. F. *civique*.]

1. a. Of, pertaining, or proper to citizens.

b. (a) civic crown (coronet, garland, wreath) [L. *corona civica*]: a garland of oak leaves and acorns, bestowed as a much-prized distinction upon one that saved the life of a fellow-citizen in war.

(b) Arch. 'A garland of oak leaves and acorns, often used as an ornament' (Gwilt).

2. a. Of or pertaining to a city, borough, or municipality; = CITY attrib.

b. Of a city as a particular kind of locality.

3. Of or pertaining to citizenship; occasionally in contrast to military, ecclesiastical, etc.; civil. civic oath [F. *serment civique*]: an oath of allegiance to the new order of things, demanded from citizens in the French Revolution.

4. Comb., as civic-minded a., inclined to concern oneself with civic affairs; public-spirited; so civic-mindedness.

"Public space in the city must surely be more than mere token compensation or vessels for this generic activity called recreation. Public spaces are firstly the containers of collective memory and desire, and secondly they are the places for geographic and social imagination to extend new relationships and sets of possibility. Materiality, representation, and imagination are not separate worlds; political change through practices of place construction owes as much to the representation and symbolic realisms as to material activities."

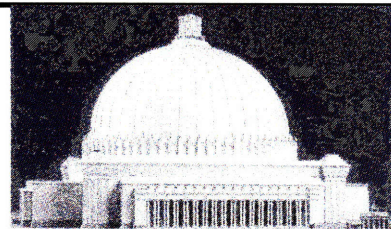
- James Corner¹

¹ James Corner "Terra Fluxus" in *The Landscape Urbanism Reader* ed. Charles Waldheim (New York: Princeton Architectural Press 2006) p33

CIVIC SPACE: Site - Structure - Spectacle



Albuquerque Civic Plaza



Design for a Nazi Germany Capital - Albert Speers

FDR addressing crowd at San Francisco Civic Center 1938



The Civic Landscape: aka. "The Commons"

Civic space organizes and represents the role of the citizen in the operation and oversight of the government. It describes the social processes of defining membership and exclusion, rules of interaction, and the desired image of the civic process.

In these processes of exclusion, an agreement must be reached on the boundaries of what is shared and what is not; what is 'common' to all members. In the evolution of societies, landscape is itemized and subdivided into zones of ownership and hierarchical proximity. The rights to use and abuse resources are defined, codified, and then governed.

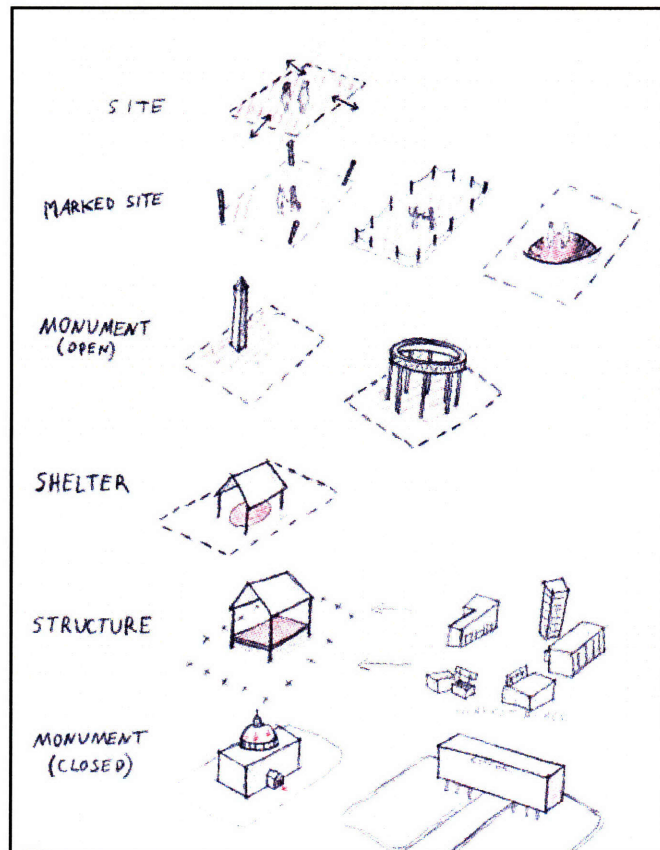
Humans are typically quite vigilant about processes of exclusion. Attempts at inclusion must be able to articulate un-recognized links and defend new interpretations of responsibility and stewardship. This is where many discussions of sustainability fall apart. They fail to craft a clear definition of the condition, resources, and use patterns of the systems being addressed.

The concept of a Commons is currently out of fashion or practice. However, understanding how this ever-present concept is constructed and regulated in human social systems is imperative to any discussion of the sustainable use and abuse of shared resources. Many

Typological Study

discussions of sustainability suffer from ambiguous definition of the system boundaries being addressed. The commons however, explicates its boundaries as well as the various social and ecological systems operating simultaneously within it.

This text will explore the contemporary construction and maintenance of conceptions of a shared commons. It will examine the strengths and weaknesses of the reviewed management techniques and potential representation in civic spaces. It will then explore the recently emergent design practice of landscape urbanism as a promising theory in its ambition and ability to mobilize the new ecologies of our future.



With a well-established history of both formal and informal arrangements the commons wraps into itself not only a defined spatial condition, but also the implicit presence of human regulatory systems. The traditional, perhaps somewhat mythical, image of the commons in the west is that of a pasture equally shared by the livestock of all members of a given community. Additional resources present on the site such as firewood, wild edible plants, or simply open space in which to walk or lie are also shared. The social values of the community would determine the methods by which membership, access, and use was regulated and the property maintained.

The precedence and potential viability of the commons is worth examining in contemporary debates of sustainability for a few reasons. First, it recognizes the use of natural resources for private benefit: most likely beyond that of basic subsistence. A common resource (a pasture) is used to produce private goods (livestock). Secondly, it formalizes the interchange between human societies and ecological systems. Natural resources are given a spatial and cultural place in complex social networks.

One characteristic of an operating commons is that the benefits to each individual are equal to those if the pasture was privately held; yet the risks and harm of any degradation to the resource are shared by all. While this appears to be a good thing, it also contains a perverse paradox. In his 1968 essay "The Tragedy of the Commons" Gareth Hardin acutely points out the potential for destruction of any shared resource as the individual benefits to an individual abuser are greater than the costs – mitigated as they are by the presence of a larger community. Quantitatively speaking, every member has greater incentive to abuse the resource than to conserve it.¹

CIVIC SPACE: Closure and Control

However, what is not obvious in Hardin's title is that there are many layers and types of management of the commons. These include; open access, private property, communal property, and state property.² Most resources are held in overlapping combinations of these.

It would seem that one reason for the current dearth of social articulations of the commons is the polarized response to the "tragedy" of open access as postulated by Hardin. Both the liberal call for privatization and the attribution of responsibility to a representative state move the burden of responsibility for a shared resource from the individual to an ever shifting 'other'.³

1 Hardin, Garrett "The Tragedy of the Commons", in *Managing the Commons* ed. John Baden and Douglas Noonan, 2nd ed. (Indiana: Indiana University Press 1998)

2 Feeny et. al "The Tragedy of the Commons: Twenty-Two Years Later", in *Managing the Commons* ed. John Baden and Douglas Noonan, 2nd ed. (Indiana: Indiana University Press 1998) p 78

3 Hackworth, Jason *The Neoliberal City: Governance, Ideology, and Development in*

The access model of communal property however, offers the explicit assumption of personal ownership of a resource while retaining within the system a framework of social activities and values. Societies have a capacity for social action that overcomes the divergence between individual and collective rationality. Many examples exist of societies and communities persisting via arrangements based on an accurate knowledge of specific resources and relevant cultural norms, which has evolved over time.

The Representation of the Commons:

"The collective imagination, informed and stimulated by the experiences of the material world, must continue to be the primary motivation of any creative endeavor. In many ways, the failing of twentieth-century planning can be attributed to the absolute impoverishment of the imagination with regard to the optimized rationalization of development practices and capital accumulation..."

- James Corner

The commons is a completely abstract concept. As such, it needs processes of representation to become perceived, developed, and respected by a community. In the state model, this might include elected or appointed administration, published regulations, and visible systems of enforcement. In the open access model, simple spatial markers may be sufficient to define the area. Perhaps an identifiable local dress, language, or behavior would suffice to police membership of those who belong to the community and share the responsibility of its management.

As the complexity and interpenetration of human and ecological systems increases, methods of exclusion and regulation have become more elaborate and specialized. While formal policy and regulation operate regardless of obvious visibility, the diversification of activities in society means that the directly accessed commons has been fragmented into narrowly defined venues of industry, consumption, and leisure. Where are the myriad images of a society's commons overlaid and unified?

The social values of a community are represented in the seat of governance – the systems of regulation. Simultaneously active player and symbol. Civic spaces would seem to carry the responsibility of representing a society's valuation of shared resources and ecological organization.

Civic spaces (not simply public spaces) are unique in that they belong to everyone and no one in particular. They serve the specific social, political, and cultural circumstances of their creation. Simultaneously, they should represent, constitute, and enhance the daily lives of citizens.⁴ The programmatic, representational, and constitutive dimensions of civic space create, or not, conditions of transaction. These conditions are where society argues over and

American Urbanism (Ithaca NY: Cornell University Press 2007)

4 Rowe, Peter Civic Realism (Cambridge Mass: MIT Press 1997) p 6

makes up rules, as in Habermas's concept of civil society and the state.⁵

While civic spaces express the changing aspects of government and civil society, certain long-lived and transcendent qualities remain. This is what makes civic spaces important to the sustainable project.⁶ While the methods and appearance of regulation may change, the basic condition of shared ecological resources must be constantly recognized

The Ambition of Landscape Urbanism:

...And so it seems landscape urbanism is first and last an imaginative project, a speculative thickening of the world or possibilities."

James Corner

Landscape Urbanism (LU) is a recent development at the confluence of the disciplines of architecture, landscape architecture, and urbanism. It attempts to use landscape as the primary organization AND representation of the city. By embedding architectural figures in an explicit landscape with layered ecological functions, the perception of our movements through a larger space of cohabitation is enhanced. LU strives to avoid the egoism of an authoritative master plan by designing the field of conditions upon which later projects with evolve.

Charles Waldheim posits Wright's Broadacre City and Hilberseimer's New Regional Pattern as seminal precedents for landscape urbanism. Both of these projects dissolved architectural figure into field and enforced a perception of

⁵ Rowe, p 74

⁶ Rowe, p 37

CIVIC SPACE: Precedent & Typology

*Piazza Del Campo
- unknown*



*Spanish Steps
- A. Specchi*



expansive, conflated regionalism. Both projects approached the concept of the commons by explicitly rendering systems to control and manage the physical scale of housing, agriculture, and industry. By addressing the integration of settlement as/in a landscape, these projects illustrate "remedies to the social inequities and ill health of pure capitalist development especially in the form of limits on private ownership, accumulation, and real estate speculation."⁷

Broadacre City proposed a proto-rural field of subsistence gardens and small farms, organized around a grid of distributed networks of transportation and communication. Through this horizontal territory of distributed private landowners, Broadacre City sought to provide a respite from the inequalities and demands created by the accumulation of wealth in industrial cities. The operative governing body would be the county government; assumable, this scalar shift might open up greater personal freedom of the individual autonomous farmer on the scale of the private property, while strengthening authority over regional organization and ecological systems.

The New Regional Pattern on the other hand, aligned the organizing networks not with an abstract grid, but with the shape and form of the natural environment. Topography, hydrology, vegetation, wind patterns, and perhaps even wildlife corridors could be used as a framework to align and orient infrastructure systems. Hilberseimer's project was unique in that it gave "priority to a complex cultural conflation of civil engineering and ecological concerns. This 'organic' conception of the urban order renders distinctions between city and countryside less relevant, offering to heal the wounds wrought on the earth by the industrial city."⁸

⁷ Waldheim, Charles "Precedents For a North American Landscape Urbanism" in *On Landscape Urbanism* ed. Dean Almy, (Austin, TX : Center for American Architecture and Design, University of Texas at Austin School of Architecture, c2007) p.301

⁸ Waldheim p 298

Piazza San Marco
-A. Tirelli



National Mall
- L'Enfant



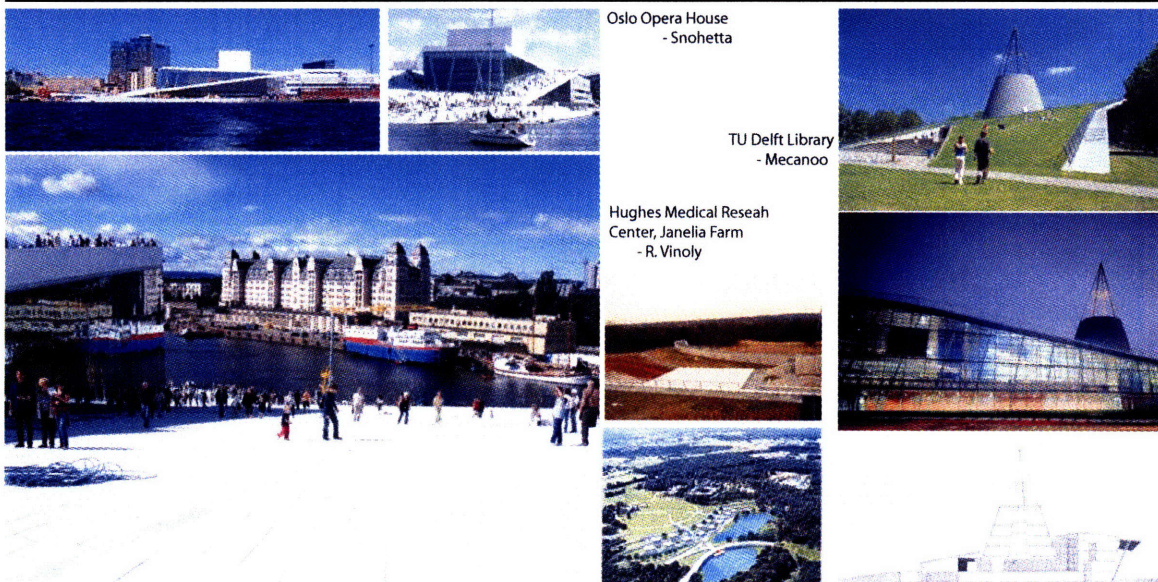
At the same time, LU need not rely upon traditional notions of infrastructure. Even a scenic viewscape is a common resource with an infrastructure of geology, vegetation, conveyance in elevation, and temporal shelter. Infrastructures may be made of views, scents, haptic variation, audible canals - anything necessary to organize necessary perceptions of the environment. To this end, while a network of greenspaces may be necessary for both ecological and social ventilation in a city, within that greenspace, there will be finer grained layers of organization coming into play that have no correlation on the larger urban/regional scale.

Another challenge for the commons is that, as a public space, it is representative of larger social values and operates to varying degrees as a prominent semiotic space of meaning and image. Yet, it would be detrimental to restrict these images have to autonomous objects or closed, finite representations. No culture or system is static. It would seem better to find expression in the arrangement and layering of infrastructure processes that allow programs, events, and gatherings to evolve over time.

One designer, Stan Allen, asserts that LU theory offers just this opportunity when approached through architecture that operates as what he refers to as material practice. In this case, material practice is defined as that which "works in and among the world of things, and not exclusively with meaning and image."⁹ Contrary to the assertions of Michel Foucault, Allen believes

⁹ Allen, Stan "Infrastructural Urbanism" in On Landscape Urbanism ed. Dean Almy, Austin, TX : Center for American Architecture and Design, University of Texas at Austin School of Architecture, c2007. Originally published in Points + Lines: Diagrams and Proj-

PUBLIC SPACE: Landscape Precedent



that architecture as a discipline has developed specific technical means and a historical competence over "territory, communication, and speed".¹⁰ By reclaiming operations of infrastructure, architecture can supplement the technical body of knowledge with new technologies of "design and simulation" to deploy "an open catalog of techniques without preconceived formal ends."

This is an alternative to the post-modern prevalence of architecture as a discursive system: expressing, critiquing, and even interrogating the realities of the world but devoid of any "possibility of ever intervening in that reality".¹¹ The commons is a real place, with real activities and regulations in constant flux. Designers need practices that work to construct the function and expression of a given site in such a way to provide service and support to future programs. According to Allen, "infrastructure creates a directed field where different architects and designers can contribute, but it sets technical and instrumental limits to their work. Infrastructure work moves away from self-referentiality and individual expression toward collective enunciation."¹²

Conclusion:

A society's conception of how its members share common space and resources is apparent whether or not it is articulated openly. However, the opportunity exists through representation and public engagement to re-interpret and organize how the boundaries of that common space are defined and the means in which membership and/or ownership are conveyed to members. If the representation of ecological systems of the commons is brought into direct contact with the daily lives of members, perhaps social systems will shift to perceive a greater value of communal ownership of the commons and thereby stewardship. As daily life in the city is organized to great extent by infrastructure, the practice of Landscape Urbanism may be best suited to accomplishing this task.

ects for the City by Stan Allen (New York: Princeton Architectural Press, 1999) p. 176

¹⁰ Allen p 177

¹¹ Allen p 175

¹² Allen p 180

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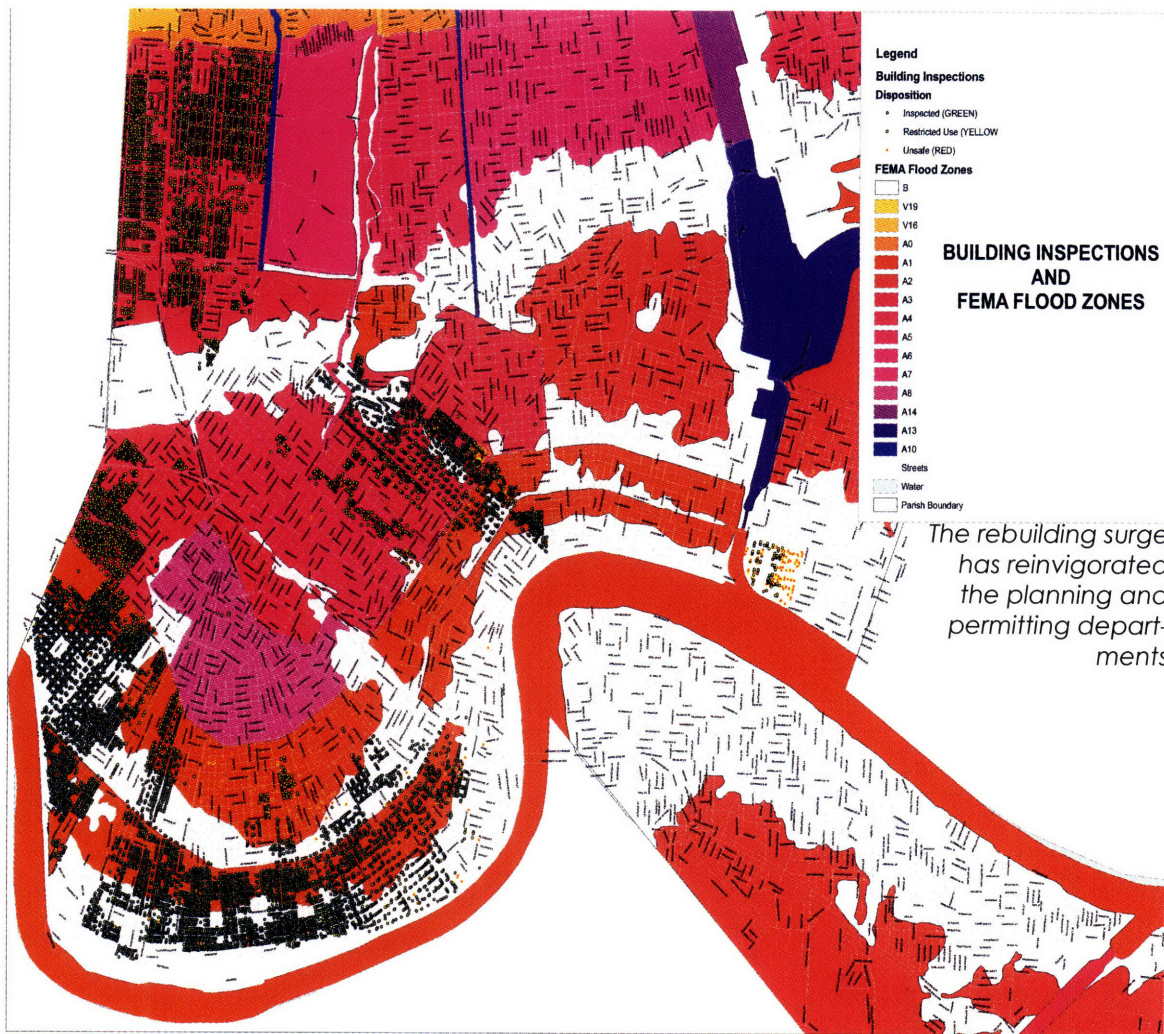


THE PROJECT: A New City Hall for New Orleans

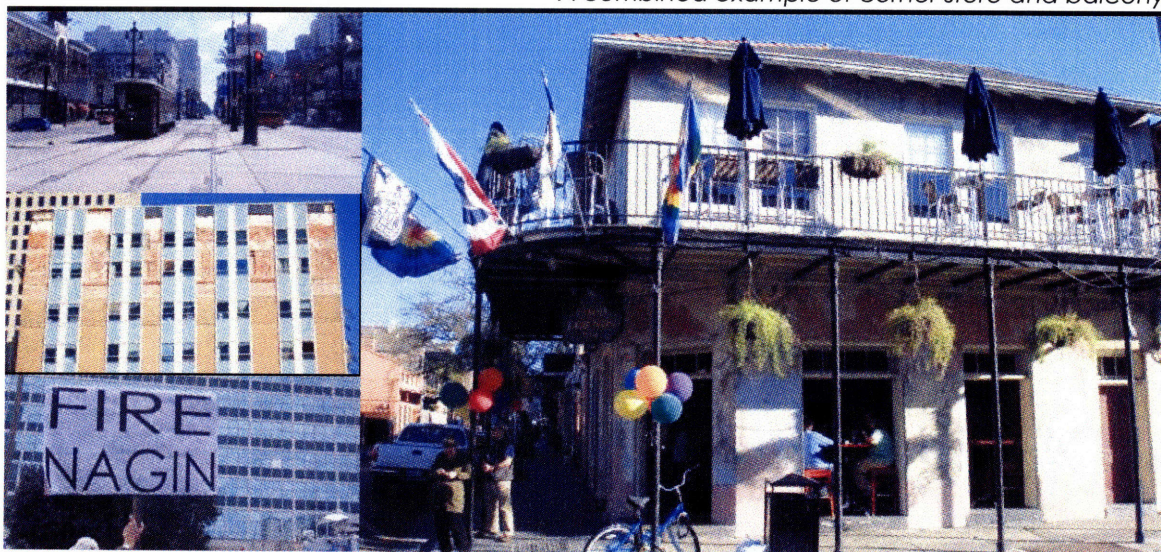


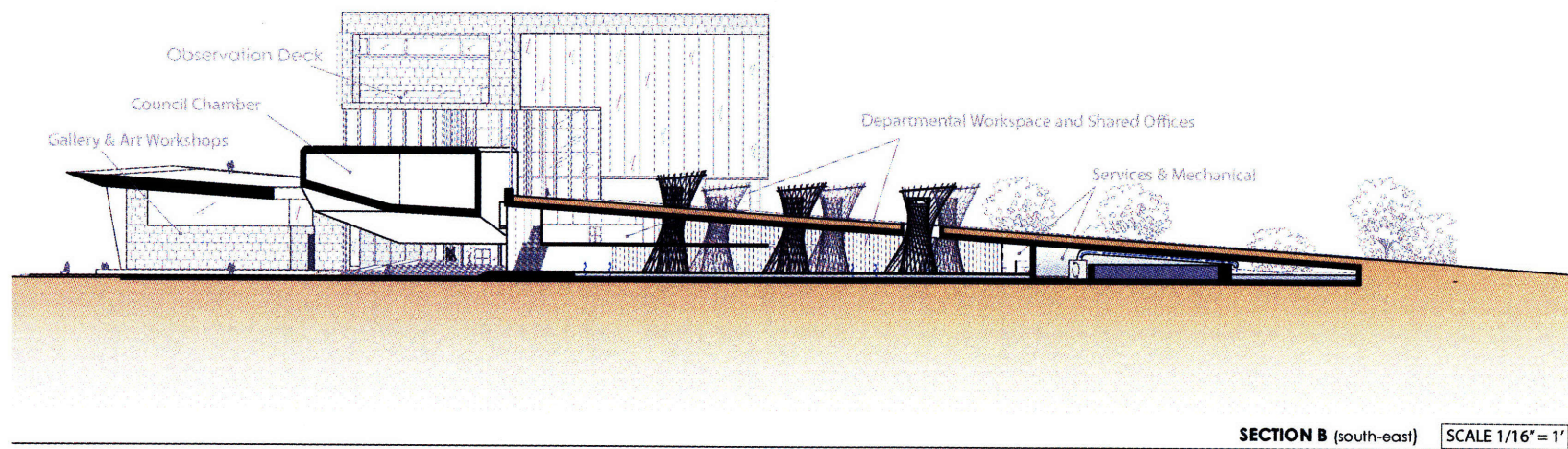
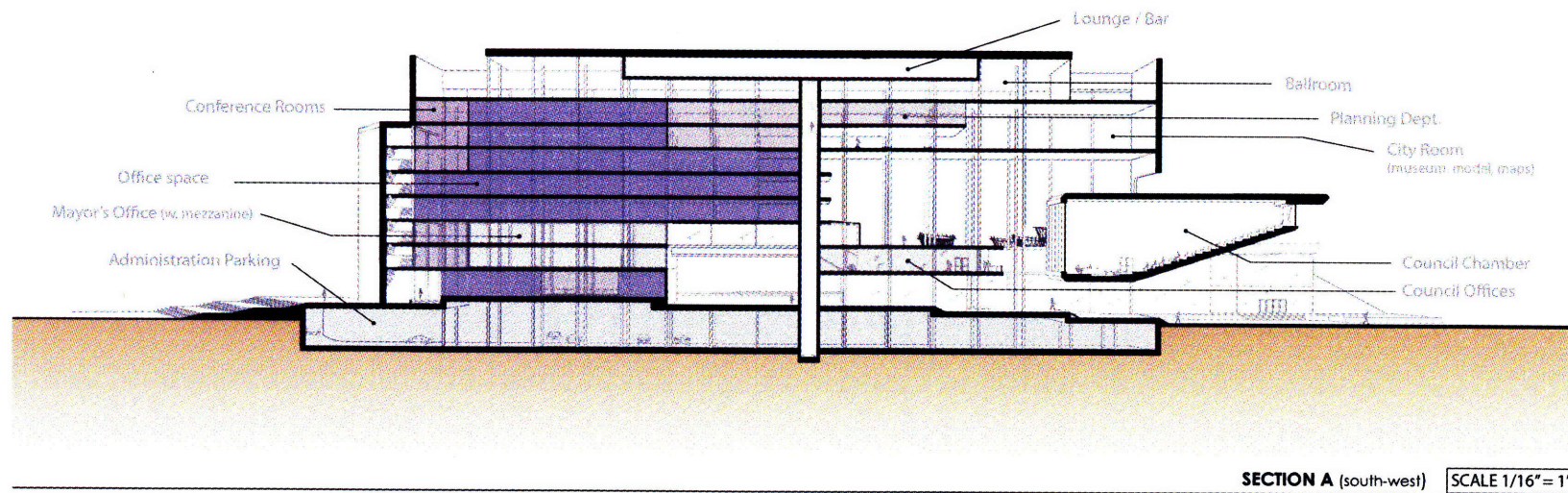
New Orleans is a city undergoing intense change. The flooding after Hurricane Katrina in 2005 decimated the city's population and housing stock. The city is challenged to find a balance between preserving and reconstructing its past self image and finding new ways to serve the new mix of people and resources.

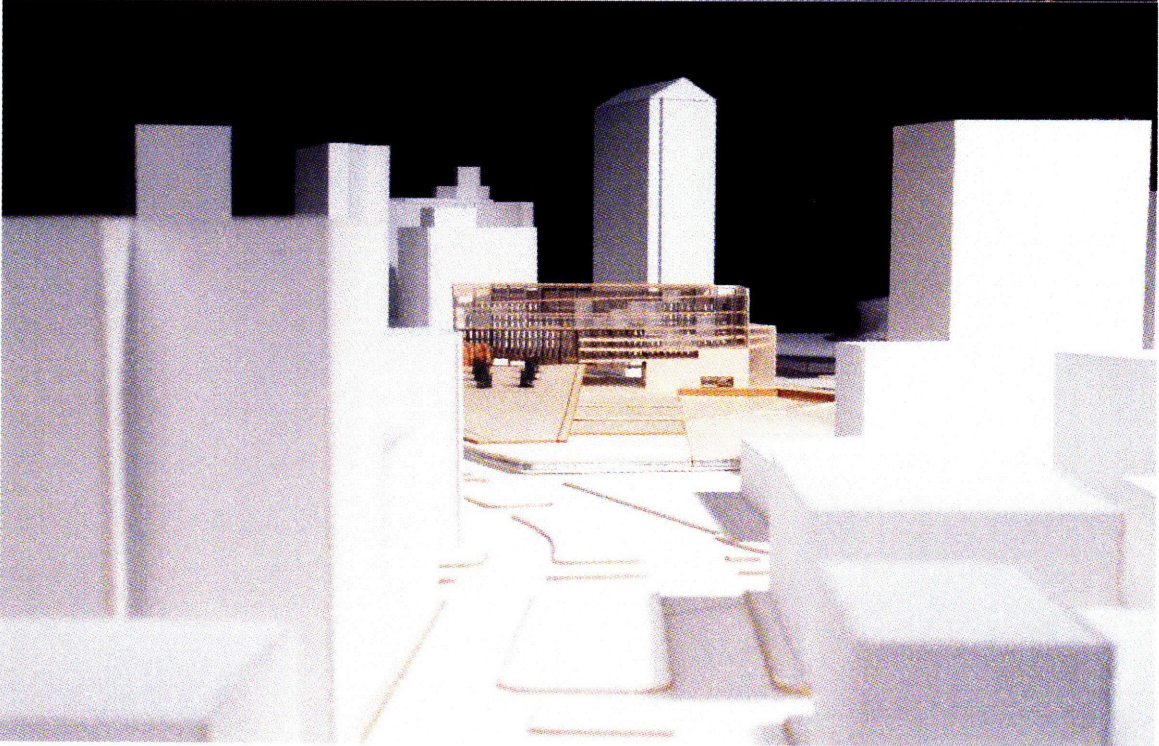
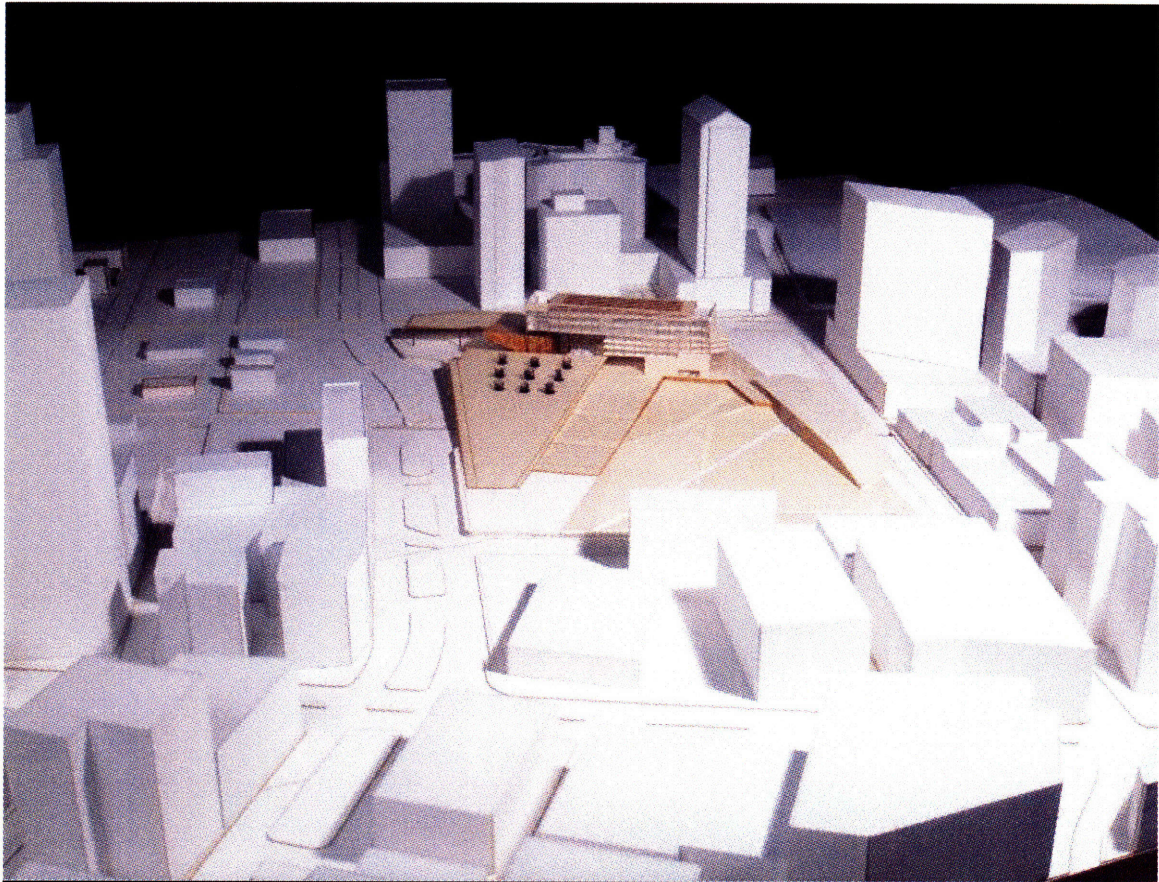
As the city changes, its representation of itself should evolve as well. The existing mid-century slab serving as city hall discourages easy access to departments from the street and interior adaptation for changes in administrative organization. A new city hall should seek to develop sustainable notions of material and societal evolution.

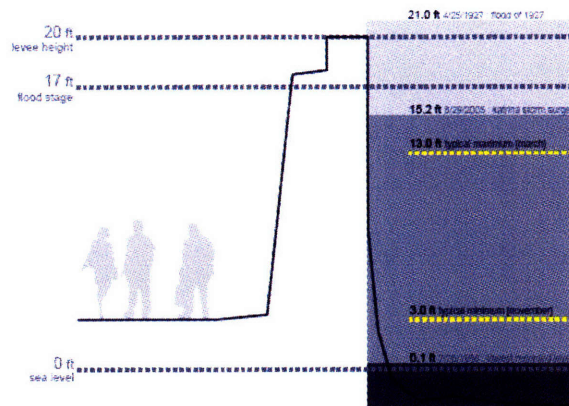
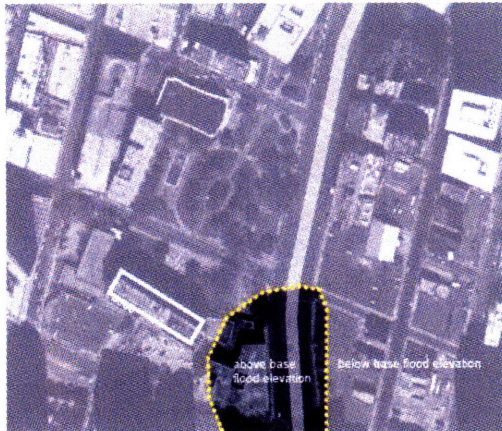


A combined example of corner store and balcony

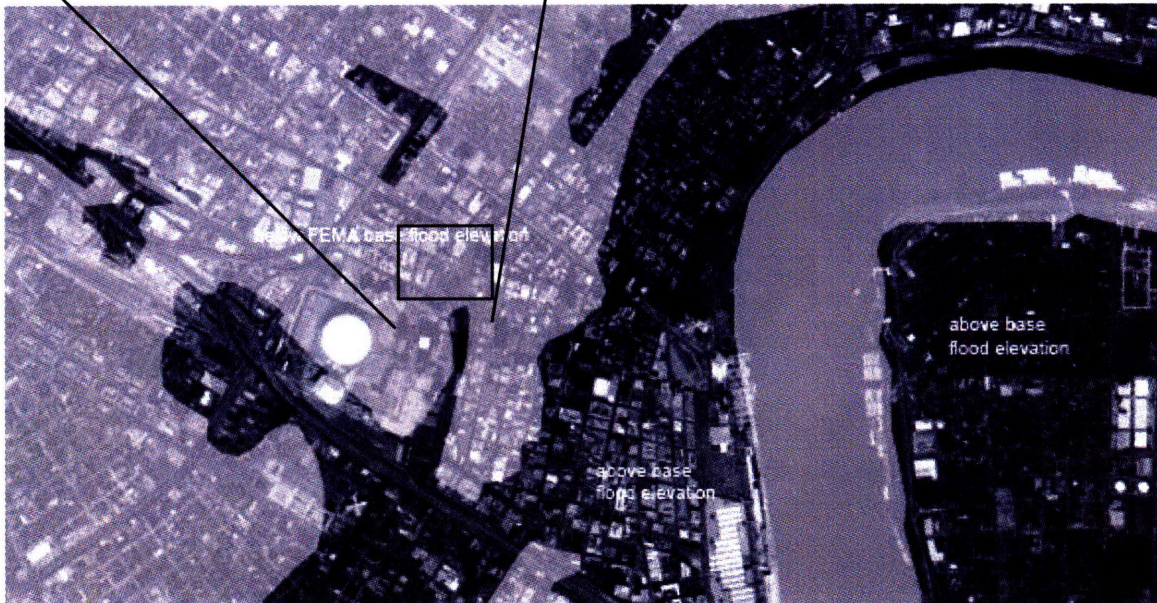








River Level Diagram, source: Duncan McIlvaine



SITE: Ecological Context

FEMA Flood Zone map 1:500



Moisture and heat are the two most obvious (and pertinent for architecture) ecological variables in New Orleans.

Much of the city lies below sea level and depends on a system of levies and pumps to stay dry. In the figure above the shaded region is recommended to be raised in any future construction.

Heat combines with moisture to create massive humidity in the summer. Vernacular solutions to solar gain include dense vegetation, covered breezeways, courtyards, and deep overhangs.

Vegetation and Micro-Climate



Outdoor shaded breezeways



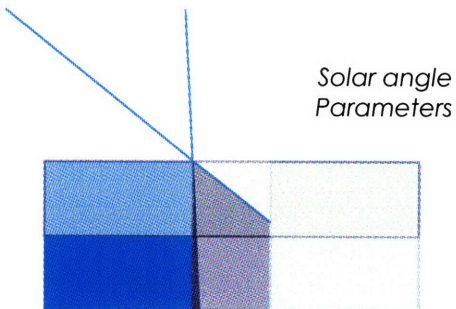
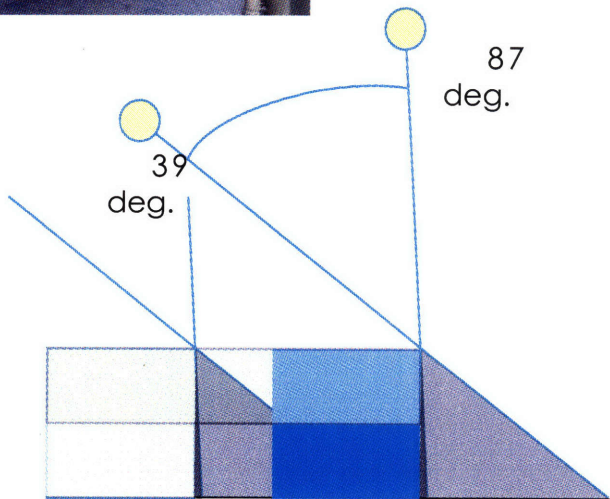
Mixed scale of vegetation allows shade, views, and privacy



Vegetation defines paths and filters views in public space

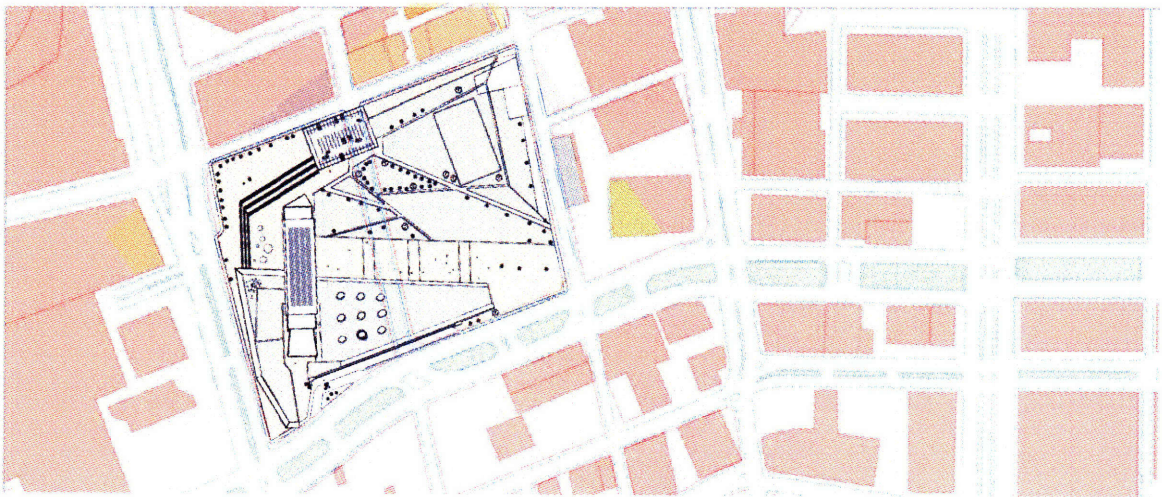


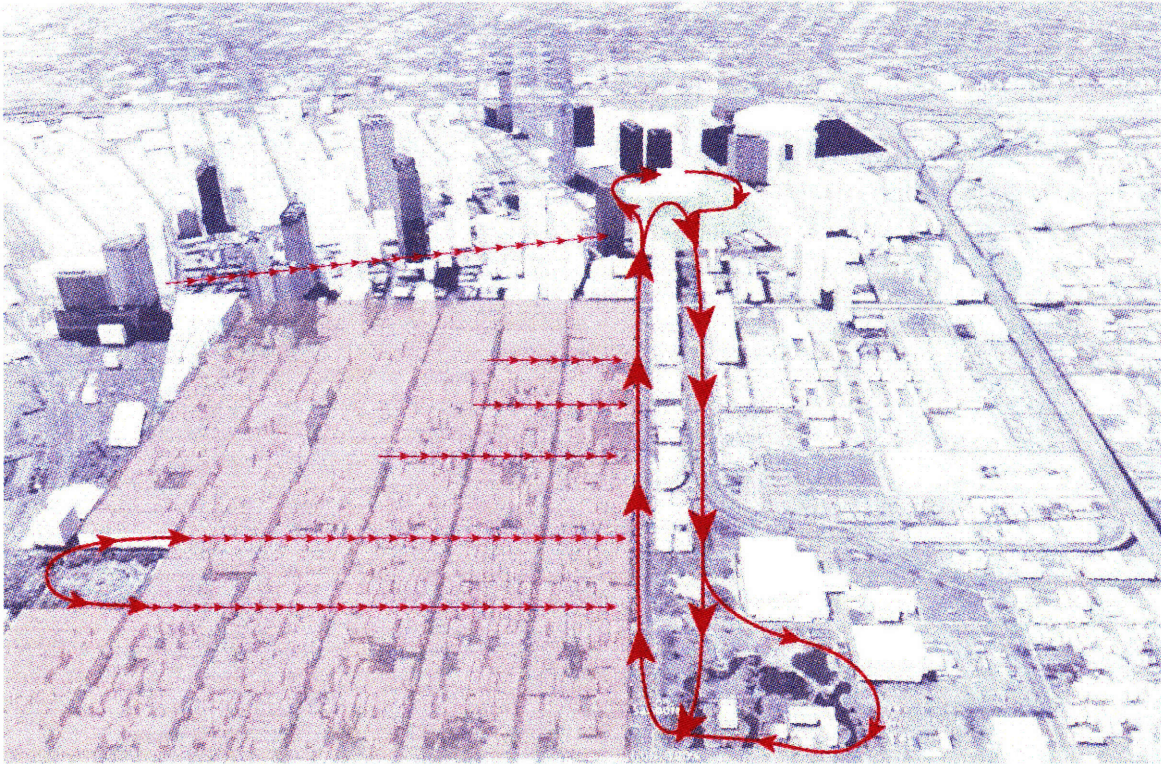
Deep overhangs





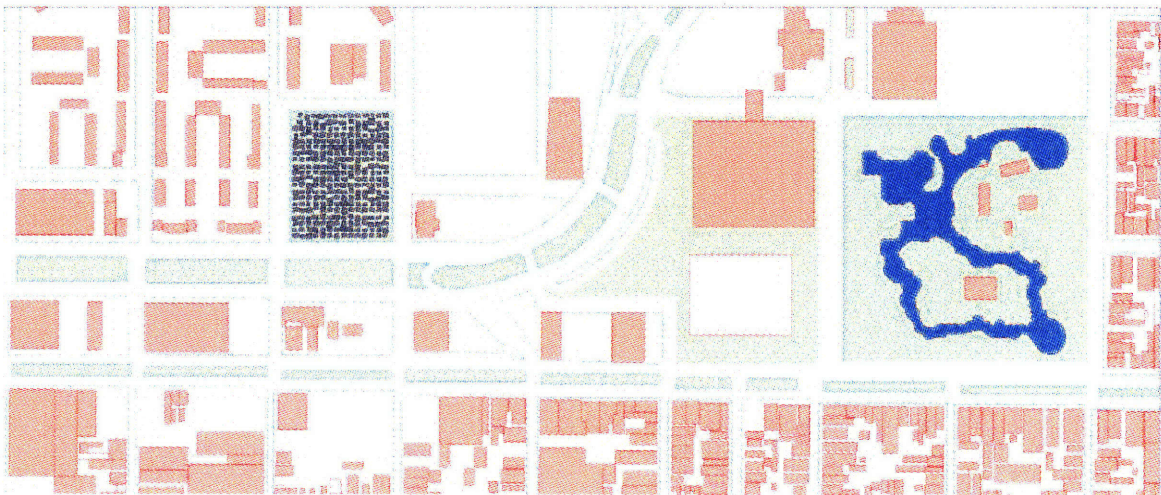
SITE: Urban Analysis and Response

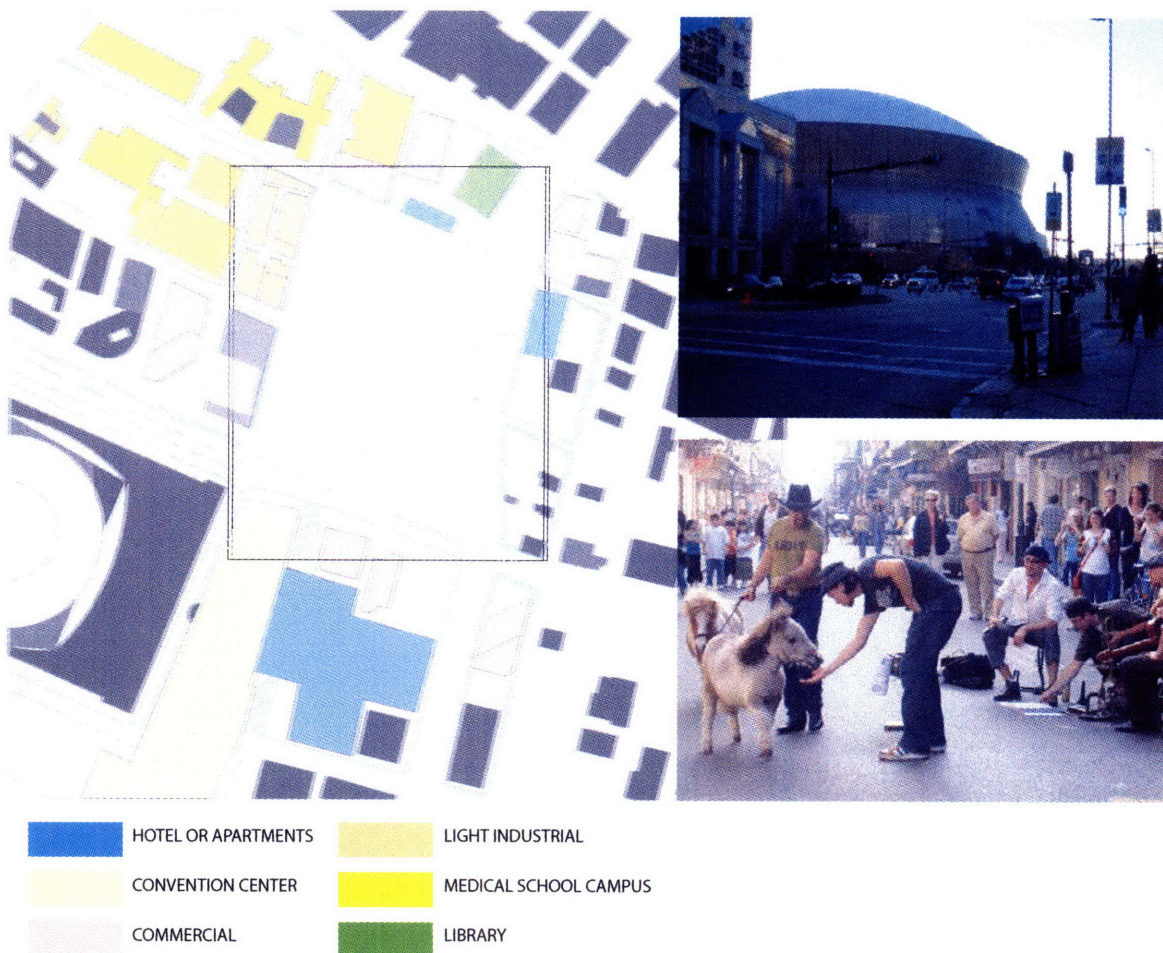




In analyzing the relation of city hall and its site to the fabric of the city, it became readily apparent that a purposeful, yet diluted link existed to Armstrong park. If city hall were to operate as a similarly scaled greenspace then a promenade and outdoor activity corridor may be created between the two. As seen above, this would parallel the Jackson Square - Riverwalk - city convention center path.

The orientation of the current administration building strongly reinforces this park axis, yet at ground level it is indistinct and obstructed. The concept for this project will respond by creating conditions in which pedestrians are elevated and share the experience of viewing from and being a focal point of the city.



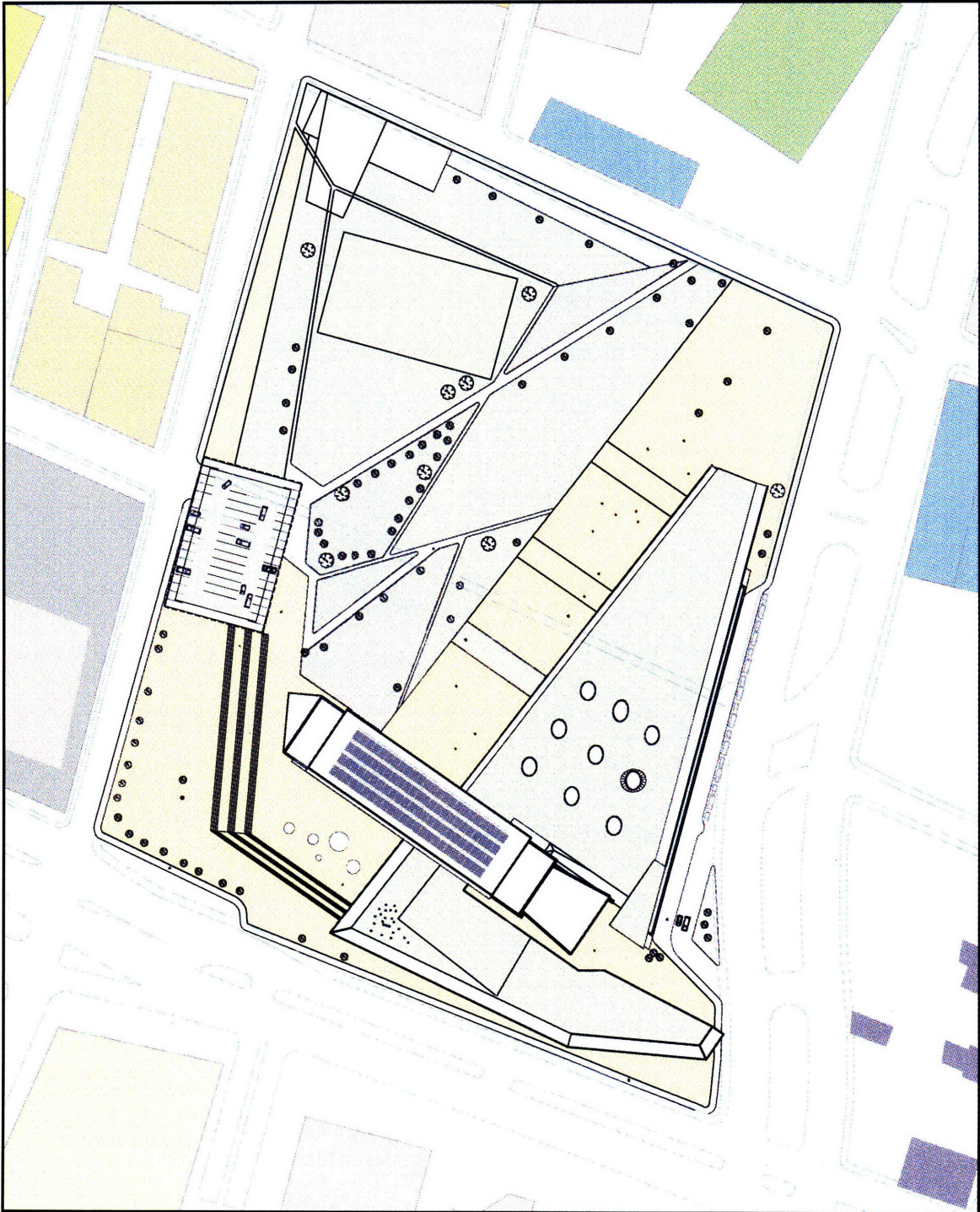


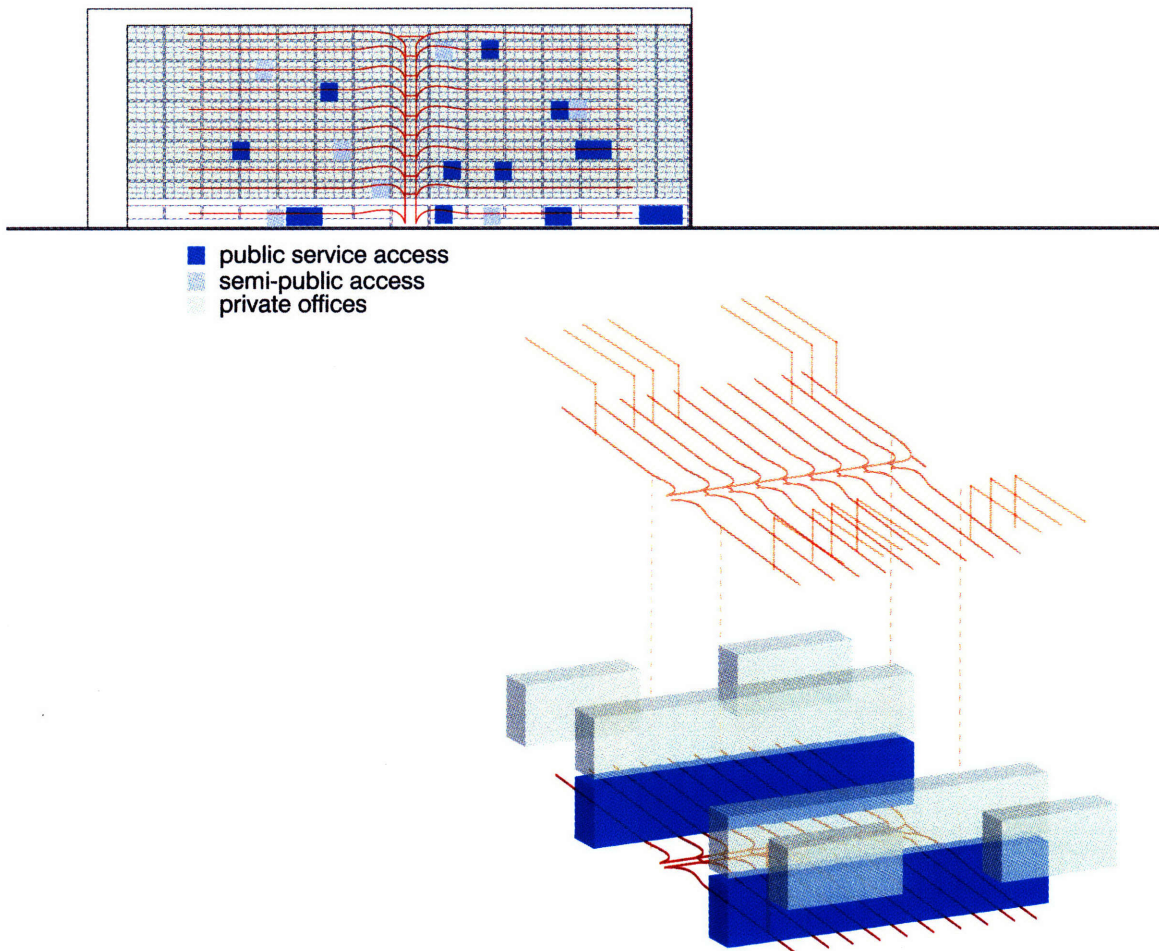
SITE: Program & Edges



The city hall site is near the center of the Central Business District (CBD). To the northwest, the Louisiana State Medical School is expanding into a new hospital and brings many students and workers. To the south west is the Superdome which appears to be the primary draw on evenings and weekends. Across Poydras, also south, the Hyatt Hotel and Convention center faces an uncertain fate as the convention hall is to be demolished and a proposition to develop a national Jazz center have stalled.

Restaurants are scarce as is retail traffic. My choice to avoid a "multi-use" development creates a "consumption free zone" that first draw people and then entrepreneurs will follow.



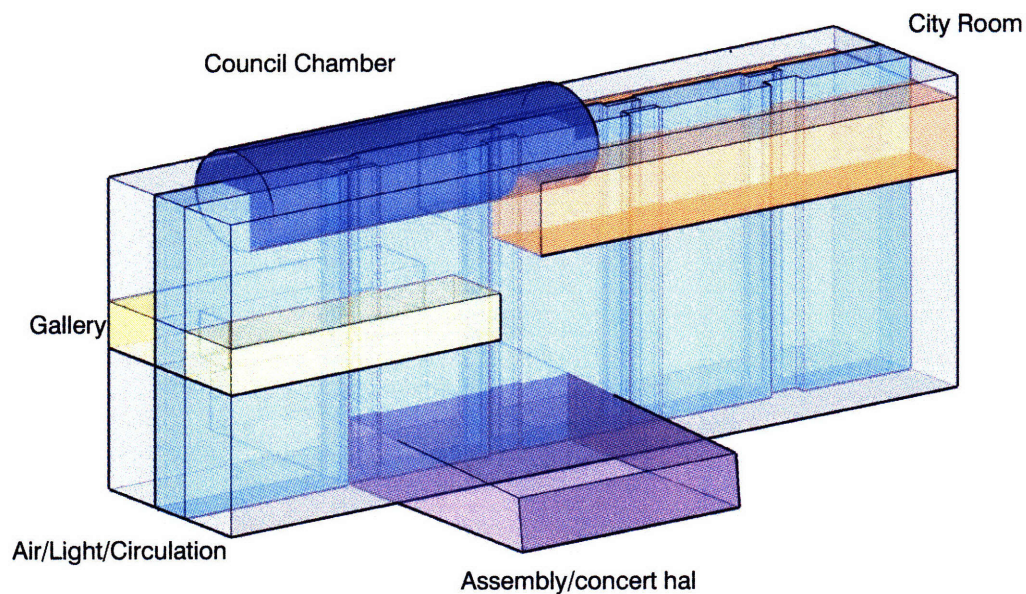


SITE: Adaptive Re-Use



The site currently holds a variety of government buildings and a parking garage. Two state owned buildings (a courthouse and an office complex) are slated for demolition due to damage from Hurricane Katrina and a reduced workforce. Although I did not conduct an exhaustive critique of the statement that "the greenest building is one that already exists"³, the main building's monumental massing, dramatic orientation towards Orleans Ave./Basin St., and a substantial north facing facade (an opportunity for increased daylighting) encouraged reuse of

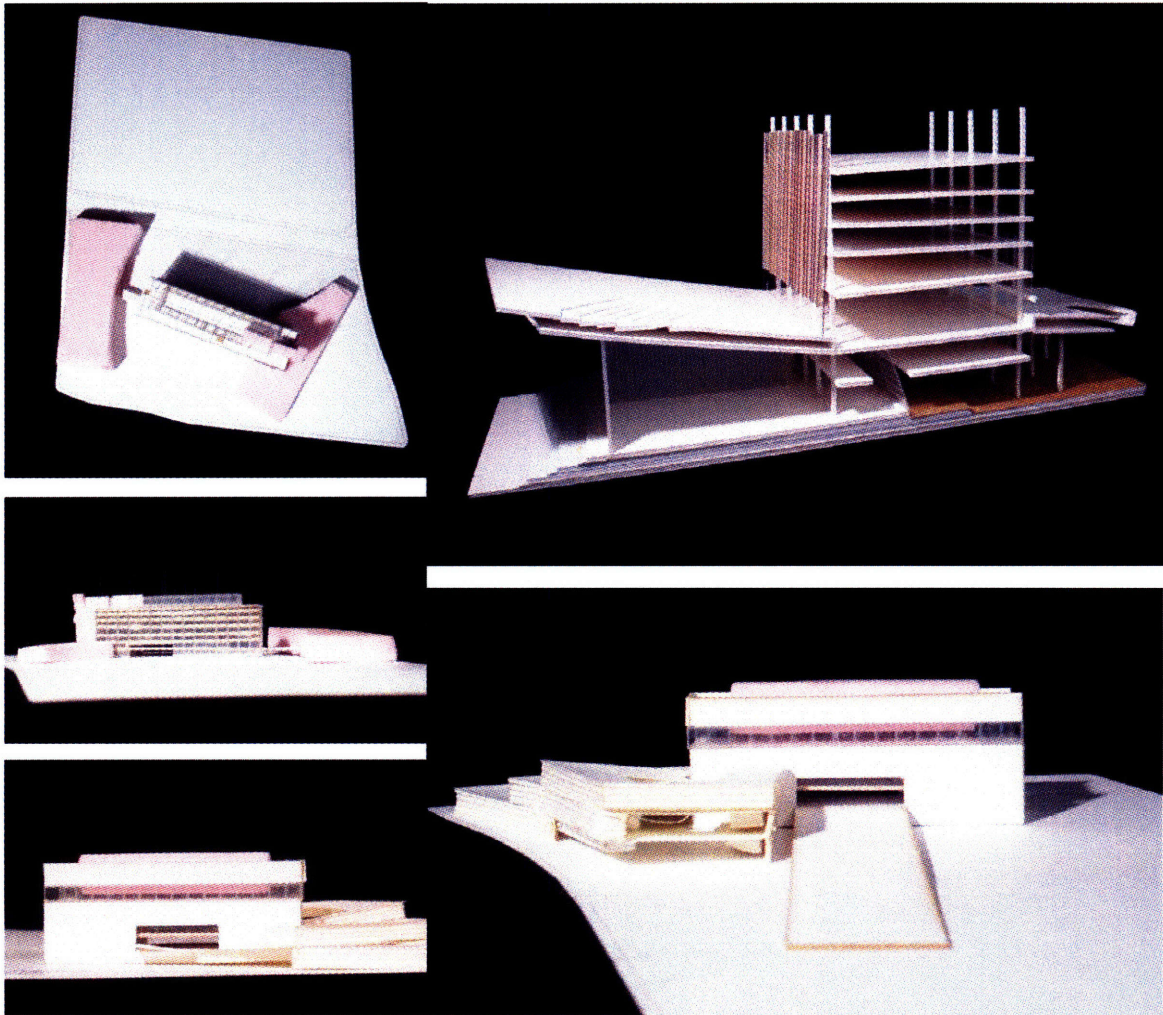
3. Richard Moe, speech, *Preservation's Essential Role in Fighting Climate Change*, December 13, 2007.
www.preservationnation.org



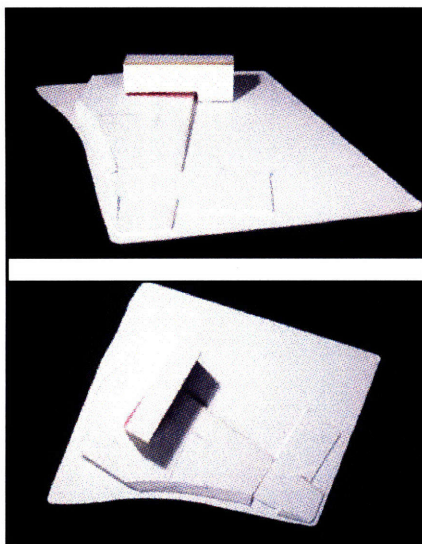
the structure. I was interested in the potential for the structure to start to be revealed from within the building's mass. This might reference a sort of artificial quality in the adapted building as well as develop the perception of the building as a flexible framework.

No structural drawings were forthcoming from the facilities manager or the planning department. Therefore, after analysis, I settled on a 20'x 26' steel column grid as the operating structure.

The sunscreen on the southwest facade is already optimized for the site and consists of precast concrete panels. In the final design solution, the screen is maintained though specific panels are removed to open up the atrium space and lower office zones.

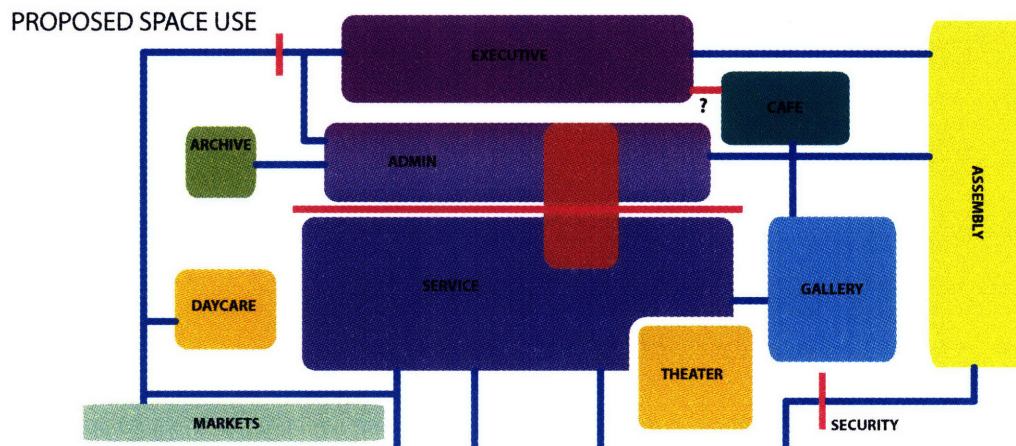
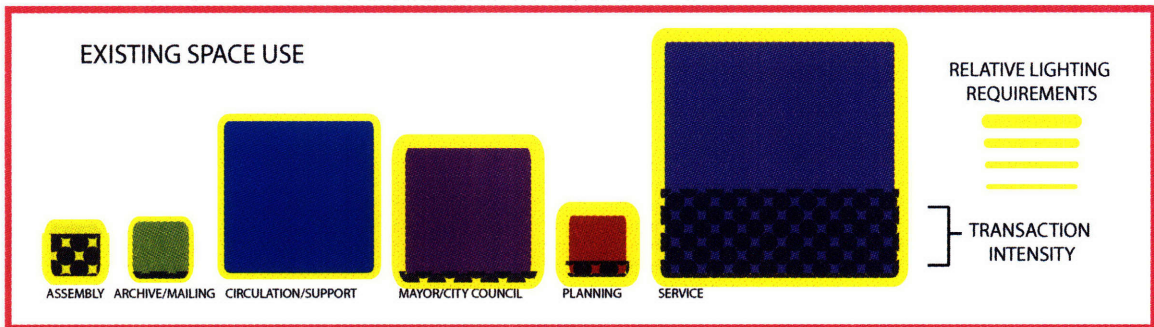
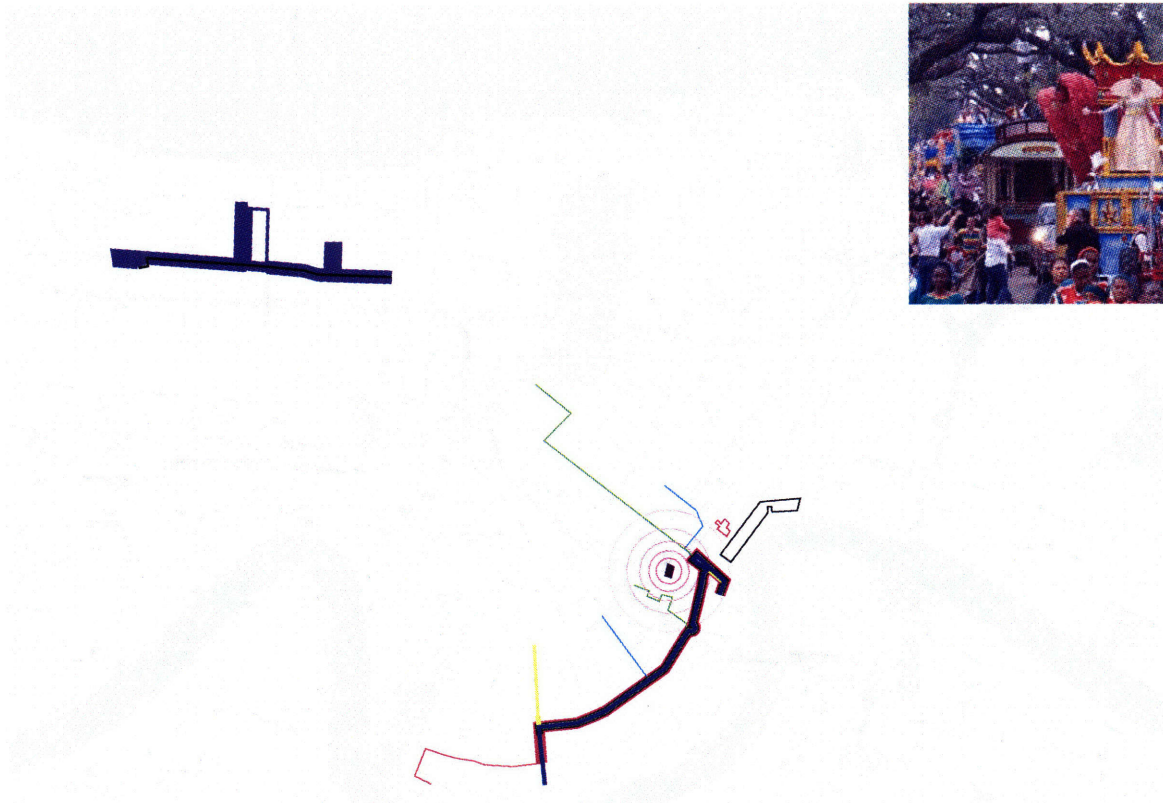


DESIGN: Concept Development



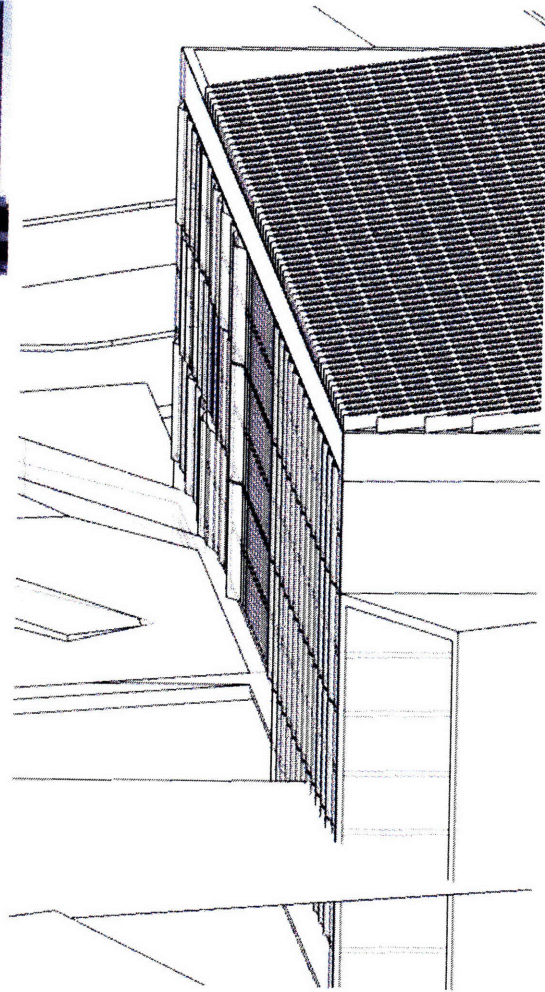
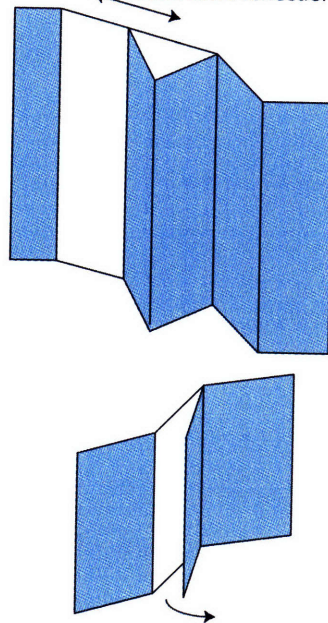
The concept was refined through considerations of street theater as both metaphor and active program. The elevation of the street as a ramp created performative space from which to see the city and be seen.

Maximizing access to daylight while minimizing solar gain also drove design decisions.

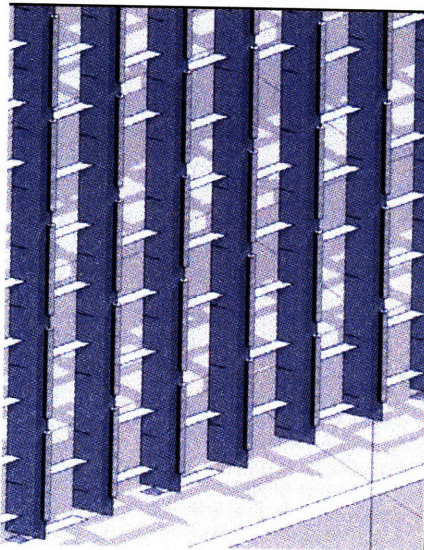




corrugated curtain wall
desembles reflection of city



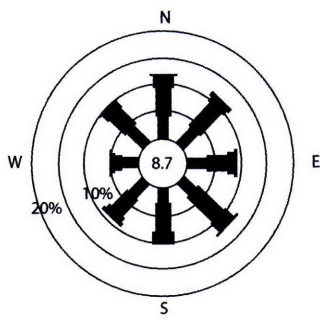
SITE: Environmental Response & Systems



The project strove to respond to the environmental conditions of the site in such a way as to maximally reduce operating energy costs. The resulting proposals included a roof top solar thermal array connected to an absorption chiller system, a new operable window facade, and light wells in the vertical slab.

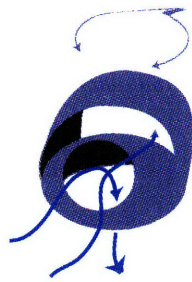
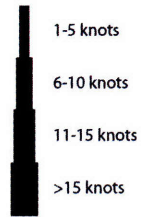
The primary support structure for the sloped ground plane is a grid of lattice columns. Light and air are brought down into the open plan workspace. Rotating windscoops direct air to create positive and negative pressures.

On the surface, the towers create a dynamic visual field and provide shade for seating areas.



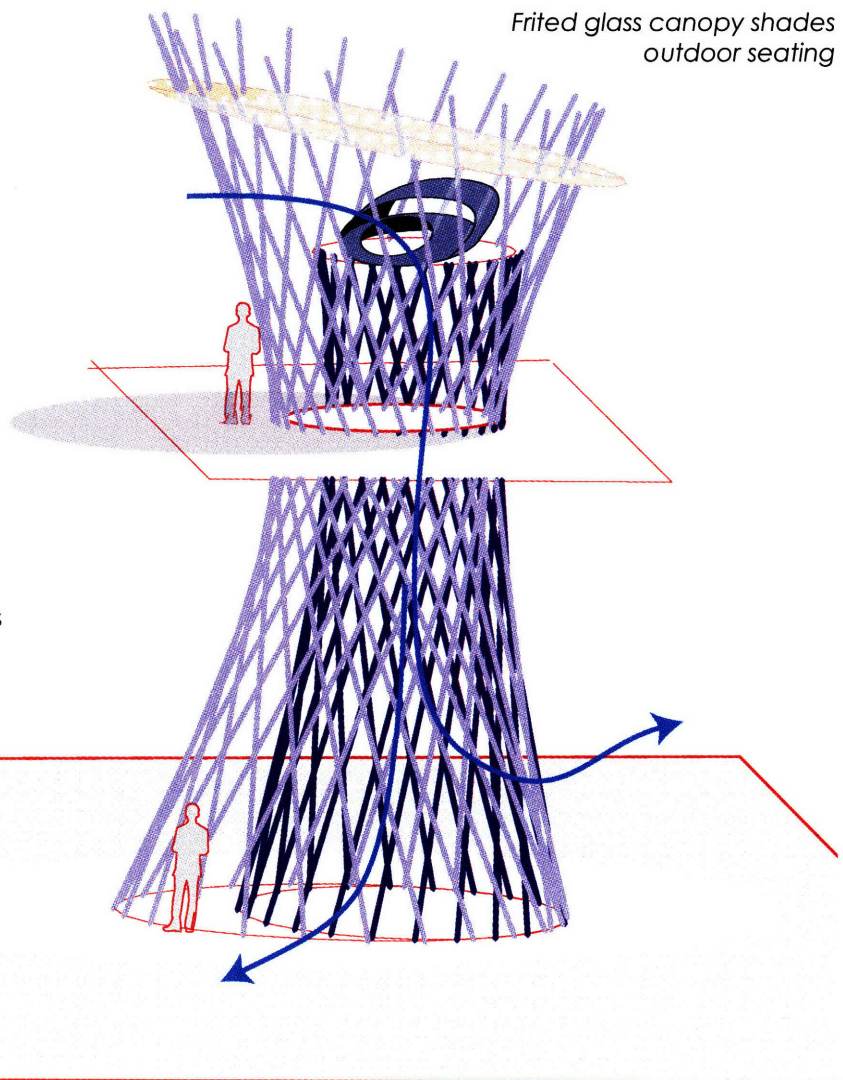
Yearly wind flows in New Orleans

Windspeed Class Designations

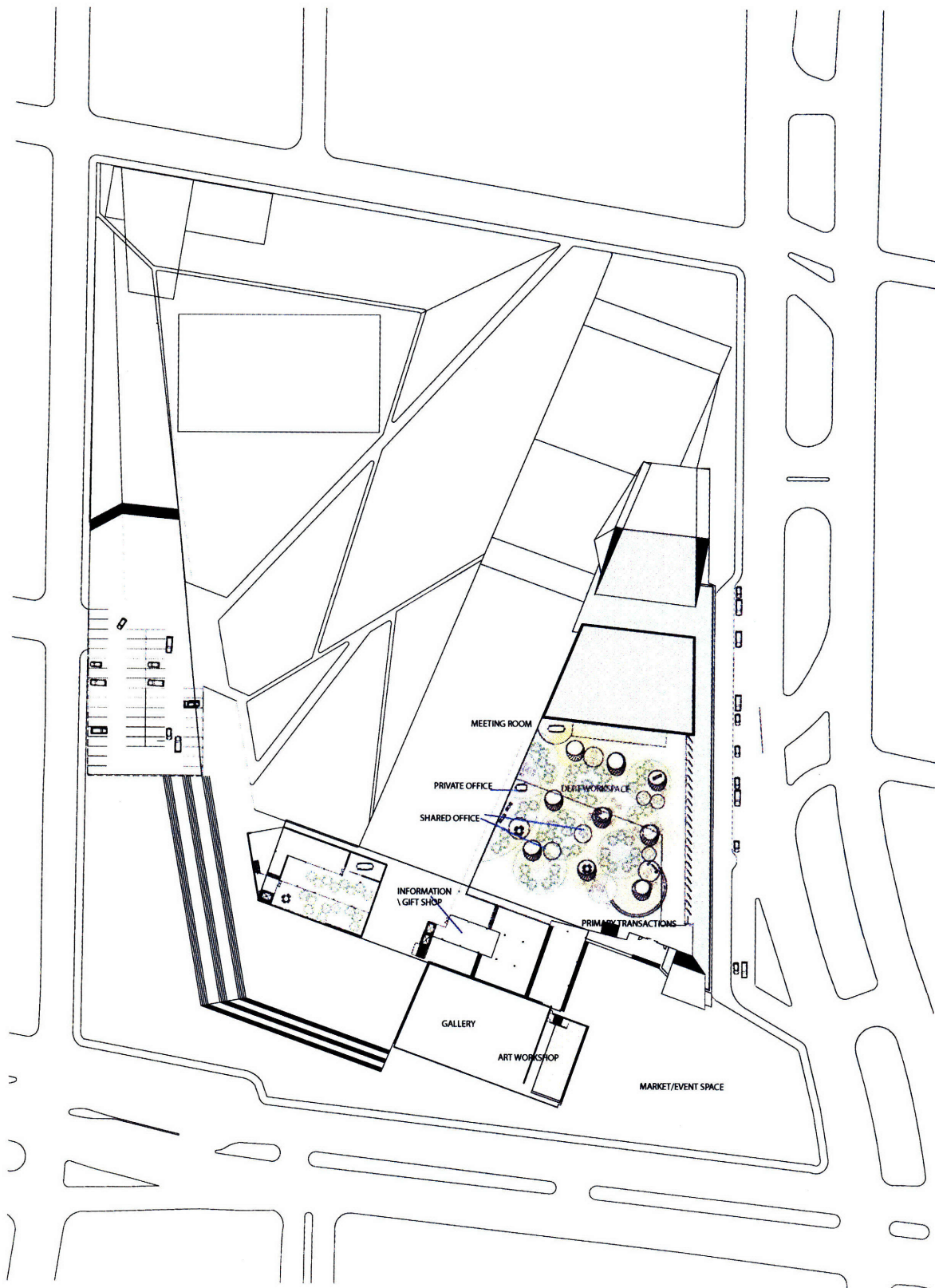


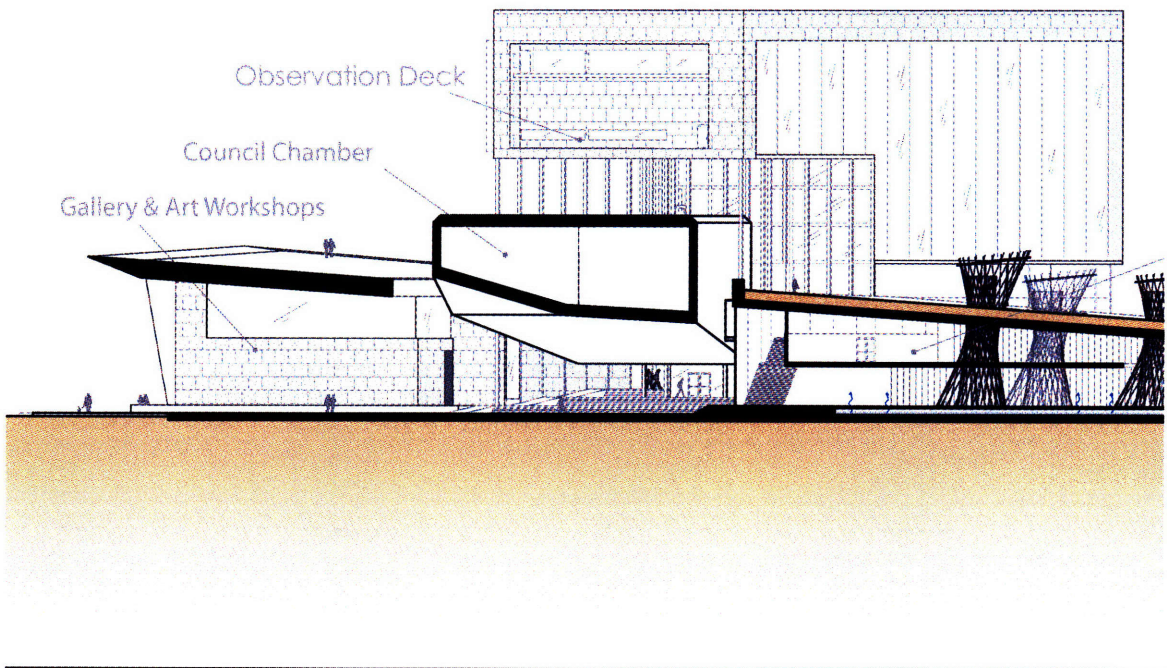
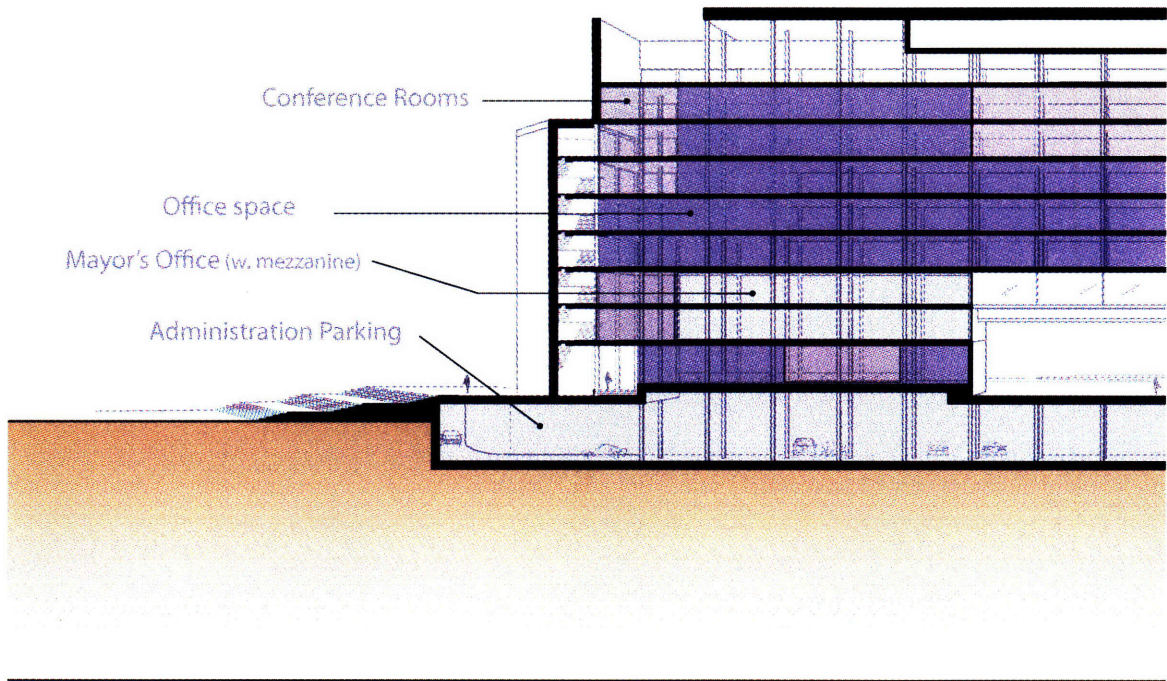
WIND SCOOP

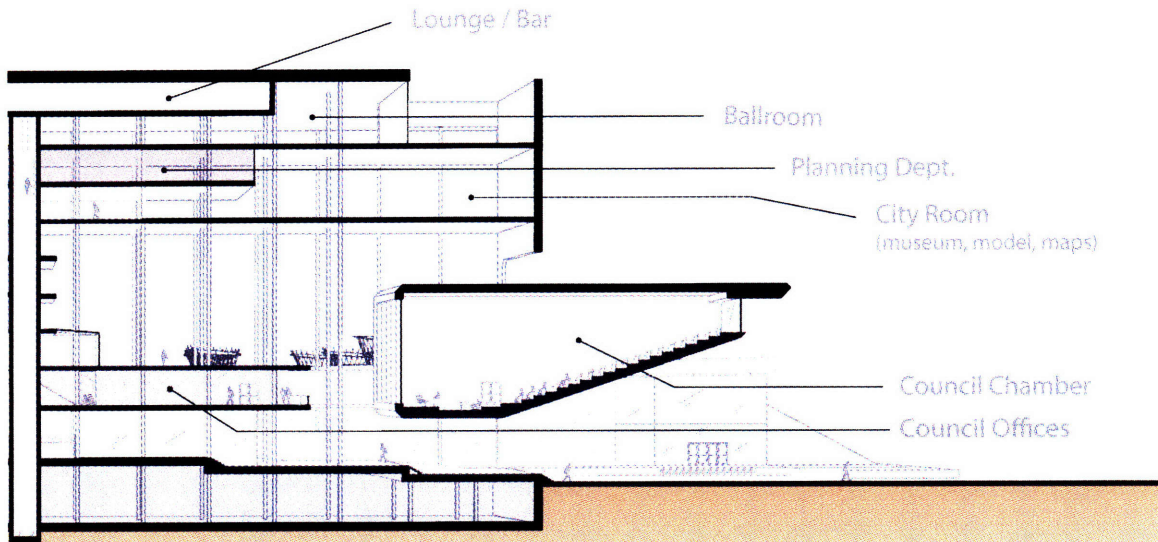
- rotates to follow N/S winds
- paired across floor plan to create positive (+) and negative (-) pressures



Plans and Sections







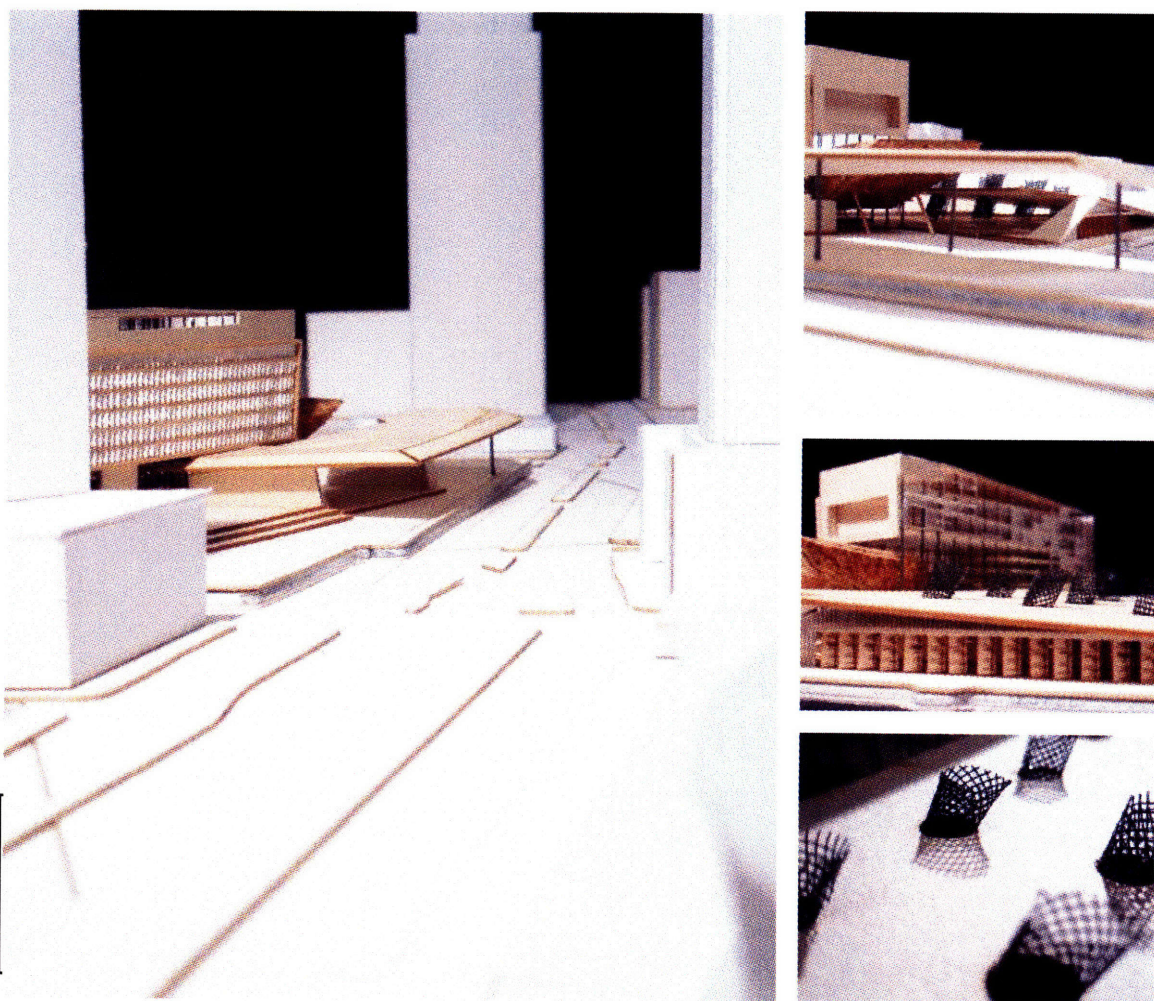
SECTION A (south-west)

SCALE 1/16" = 1'

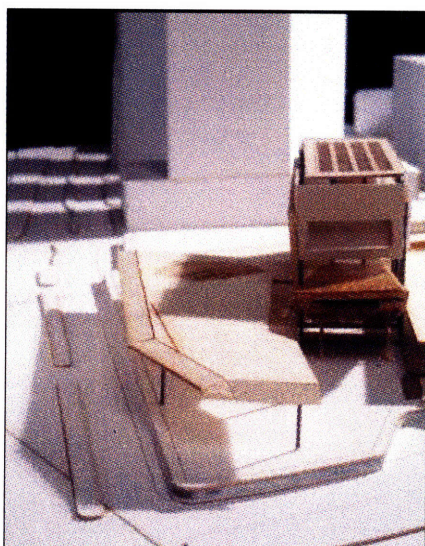


SECTION B (south-east)

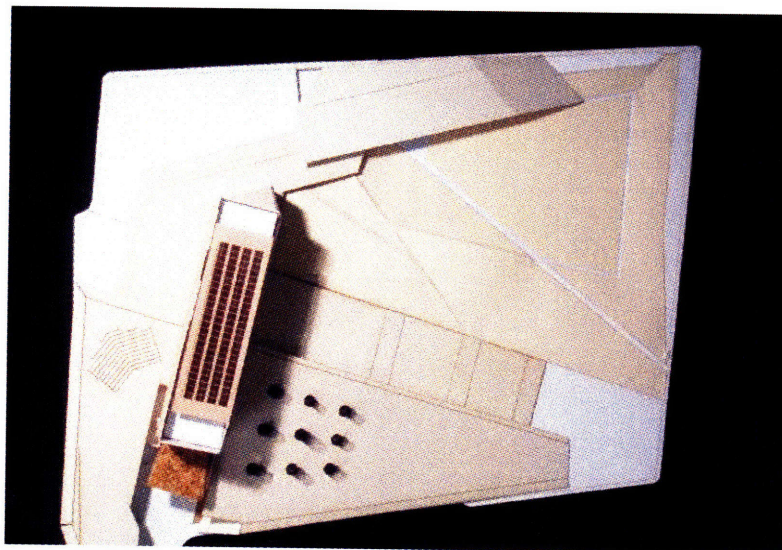
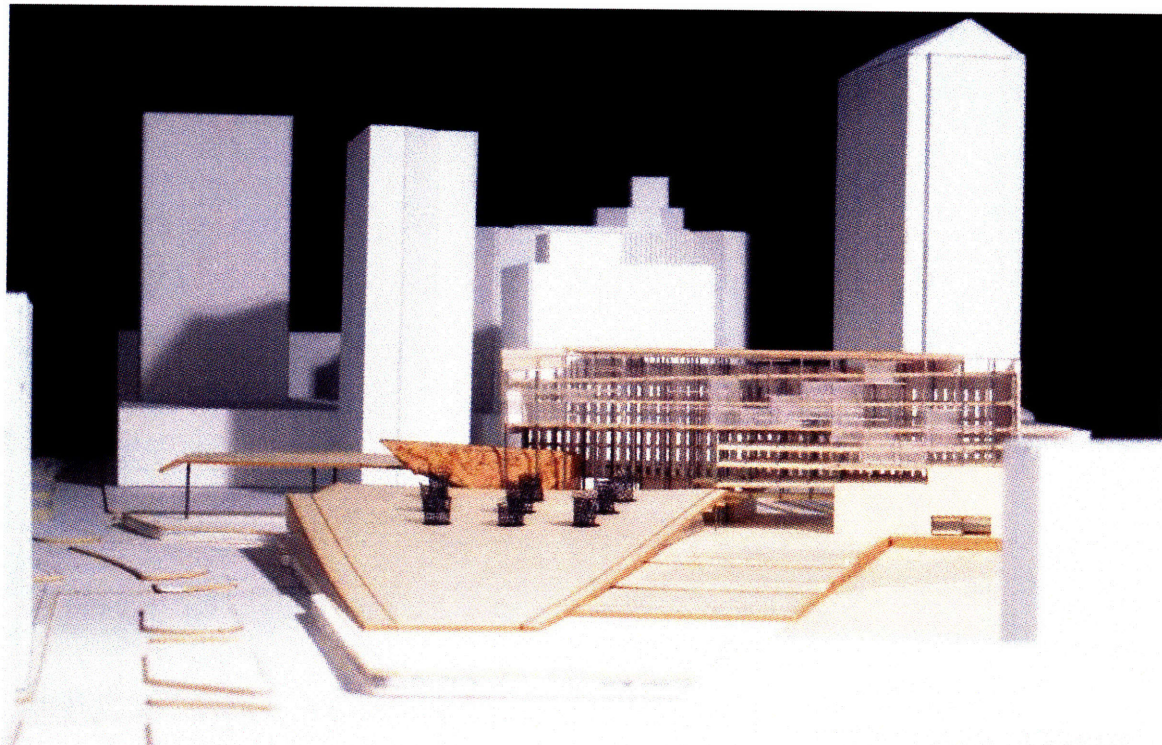
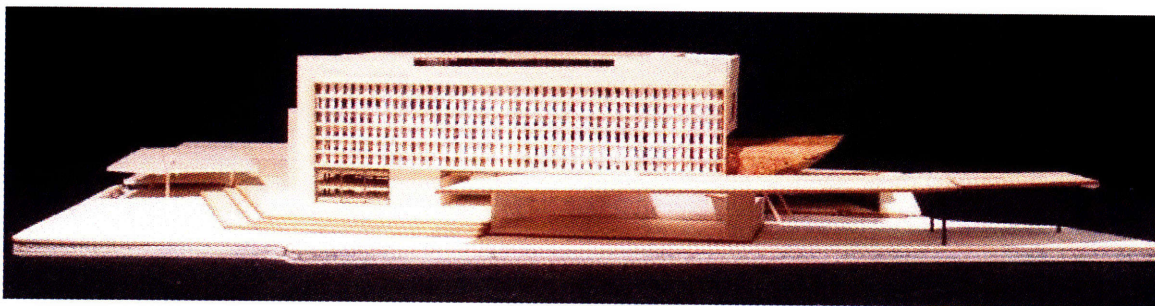
SCALE 1/16" = 1'



RESOLUTION



the final composition generates dynamic spaces at the intersection of circulation paths along and against the dominant axis of the vertical slab. The cutting of the sloped plane through the slab produces a passageway operating as an urban threshold between the CBD and the new promenade to the French Quarter. Also, the council chamber floats in the junctures, visually anchoring the primary access zone, acting as a pivot for all paths. The Loyola facade opens over a pool of water to allow ventilation and visual connection while maintaining security. The large roof becomes an extended wing, sheltering and framing a covered market/event space.



BIBLIOGRAPHY:

Allen, Stan "Infrastructural Urbanism" in *On Landscape Urbanism* ed. Dean Almy, Austin, TX : Center for American Architecture and Design, University of Texas at Austin School of Architecture, c2007. Originally published in *Points + Lines: Diagrams and Projects for the City* by Stan Allen (New York: Princeton Architectural Press, 1999)

Corner, James "Terra Fluxus" in *The Landscape Urbanism Reader* ed. Charles Waldheim New York: Princeton Architectural Press 2006

Feeny, David, Fikret Berkes, Bonnie J. McCay, and James M. Acheson, "The Tragedy of the Commons: Twenty-Two Years Later", in *Managing the Commons* ed. John Baden and Douglas Noonan, 2nd ed. Indiana: Indiana University Press 1998

Habermas, Jurgen *The Structural Transformation of the Public Sphere* Cambridge MA: MIT Press 1989

Hackworth, Jason *The Neoliberal City: Governance, Ideology, and Development in American Urbanism* Ithaca NY: Cornell University Press 2007

Hardin, Garrett "The Tragedy of the Commons", in *Managing the Commons* ed. John Baden and Douglas Noonan, 2nd ed. Indiana: Indiana University Press 1998

O'Toole, Randal "The Tragedy of the Scenic Commons) in *Managing the Commons* ed. John Baden and Douglas Noonan, 2nd ed. Indiana: Indiana University Press 1998

Rowe, Peter *Civic Realism* Cambridge Mass: MIT Press 1997

Waldheim, Charles "Precedents For a North American Landscape Urbanism" in *On Landscape Urbanism* ed. Dean Almy, Austin, TX : Center for American Architecture and Design, University of Texas at Austin School of Architecture, c2007.